(No Model.)

P. BRIGHAM.

SEWING MACHINE ATTACHMENT FOR SEWING WELTS.

No. 320,043. Patented June 16, 1885.

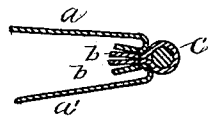


Fig. 1.

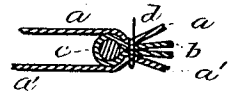


Fig. 2.

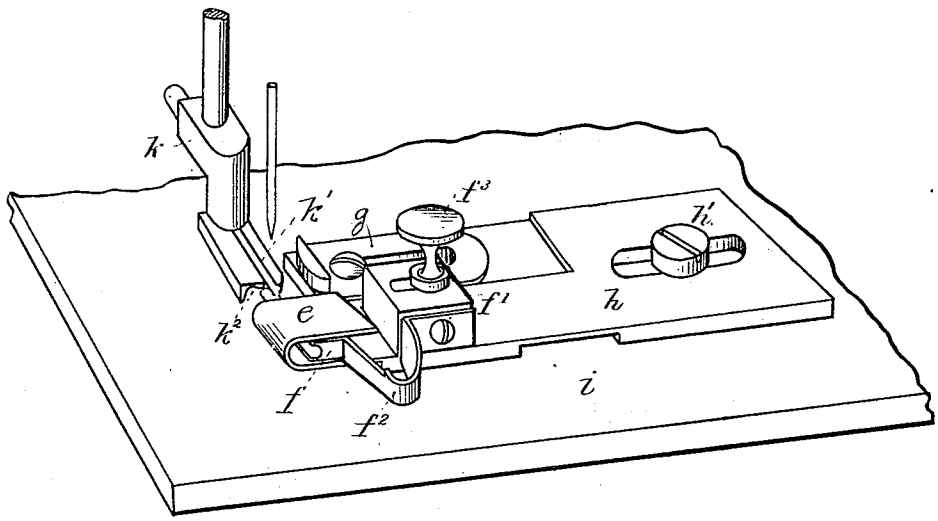


Fig. 3.

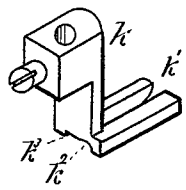


Fig. 4

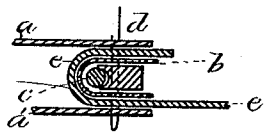


Fig. 5.

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UNITED STATES PATENT OFFICE.

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SEWING-MACHINE ATTACHMENT FOR SEWING WELTS.

SPECIFICATION forming part of Letters Patent No. 320,043, dated June 16, 1885.

Application filed July 24, 1883. (No model.)

To all whom it may concern:

Be it known that I, PERRY BRIGHAM, of Boston, in the county of Suffolk and State of Massachusetts, a citizen of the United States, have invented a new and useful Improvement in Attachments to Sewing-Machines for Sewing Welts in Cushions, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

In making cushions or mattresses it is customary, in order to make them with square corners, to make them out of six pieces of cloth or other fabric—one piece for the front, one piece for the back, a piece for each end, and a piece each for the top and bottom. The edges of these pieces are united to the edges of other pieces of the cloth or fabric with an interposed welt, which, in the case of carriage or upholstery cushions, has a cord in them, which corded welt projects slightly beyond the surface of the cushion and determines the angle. Frequently, also, if the cushion is not intended to have square sides, the corded welt is introduced and the cushion quilted through its body after being stuffed. The work of sewing together these cushion-edges has hitherto been done by hand.

This invention relates to a sewing-machine attachment for laying the cording-welt and stitching the surfaces of the cushion-cover to it at one operation.

In the drawings, Figure 1 represents two edge-surfaces of the cushion with the interposed corded welt, the corded welt projecting from the edge and serving as a protection to it. Fig. 2 shows the two surfaces, the welt, the cord, and the stitch in the position in which they are sewed. Fig. 3 is a perspective of the work-plate of a sewing-machine with the attachment in position, and with the awl or needle in position to make a stroke. Fig. 4 shows the presser-foot with the recesses for cord and fabric requisite. Fig. 5 is a section through the parts of the machine which adjust the work for presentation to the needle, with the pieces which make the welt and the cushion-surfaces in position for sewing.

In the drawings, *a a'* are the cloths or leathers which make the surface of the cushion. *b* is the fabric making the welt, and *c* is the marline or cord to be inserted in the welt. *d* is the uniting-stitch.

Upon the work-plate of a machine, *i*, adjacent to a needle, is placed a plate, *h*, which is clamped, preferably, through a slot, with a binding-screw, *h'*, to the work-plate. This plate has a welt-folding guide at its needle end, called hereinafter the "welt-guide," *e*, and a recess sufficient for a thickness of the cushion fabric is made beneath it. This plate *e* is bent over upon itself, as shown, forming a sort of U loop.

The cushion fabric is placed, one part of it below said loop or welt-guide *e*, and the other part of it above the upper surface of said loop or welt-guide *e*. On the interior of said loop or welt-guide *e* is a cording-block, *f*, having a groove in its outer edge, so adjusted as to leave a proper space between the edge of the block *f* and the bend of the loop or welt-guide *e* for the passage of the cord or marline. This block *f* is mounted on a spring, f^2, which spring is attached to an adjustable block, *f'*, which is clamped through a slot, f^3, to the work-plate *h*.

Any reasonable sized marline may of course be used in this machine, and the block *f'* can be adjusted to and fro to put the proper pressure upon it.

The gage *g* is also mounted upon the plate *h*, and is adjustable to and from the needle-plates, in the usual way, by a screw.

The presser-foot *k* has a slot in it, *k'*, within which the needle plays, and is recessed on its bearing-surface at k^2 for the marline and welt surrounding it, and at k^3 for the thickness of the other goods. The end of the gage *g* determines, by its distance from the needle-thread and needle, the projection of the edges of the welt and cushion surfaces inside of the cushion when in position.

To work a machine with this attachment, one surface of the cushion-cover is placed right side up beneath the welt-guide *e* of the plate *h*. The fabric forming the welt is then placed with the side that is to be presented outward when the cushion is finished next the inside of the loop or welt-guide *e*, partly under and partly over the cording-block *f*. The marline is led through the bend of the welt

inside of the welt-guide *e*, and the other surface is placed wrong side out on top of the welt-guide *e*. This adjustment of the pieces to be sewed is shown very clearly in Fig. 5. The machine then being started will stitch the cushion with the thread *d*, as shown in Figs. 5 and 2, and the cushion, when completed, except upon one edge, as is usual, will then be turned right side out and filled and the remaining seams closed by hand, as is customary.

I am aware that guides for stitching welts have hitherto been made, and I am also aware that what are called "corders" have been described for attachments to sewing-machines; but I am not aware that any attachment for a sewing-machine has ever been organized hitherto which unites a corded welt to the different surfaces of fabric by one movement at one operation, and in the manner and by the mechanism herein specified.

This attachment is suitable for placing either upon the wax-thread or upon the dry-thread sewing-machine.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

In combination with the work-plate of a sewing-machine, the plate *h*, adjustable with all it carries to and from the path of the needle, and carrying the welt-guide and corder *e*, independently adjustable in the same directions as the plate *h*, said independently-adjustable corder being provided with the spring cording-block *f*, substantially as described.

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Witnesses:
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